

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-15. (Cancelled)

16. (Currently Amended) A method for decreasing neuronal synaptic transmission of a CA1 pyramidal neuron ~~neuron in a mammalian subject in need thereof~~, the method comprising contacting said neuron with an amount of an inhibitor of protein kinase M zeta (PKM $\zeta$ ) that is effective to decrease synaptic transmission in said neuron, ~~and wherein the synaptic transmission comprises long-term potentiation (LTP)~~.

17. (Previously Presented) The method of claim 16, wherein the neuron is a brain neuron or a spinal cord neuron.

18. (Currently Amended) The method of claim 16, wherein the contacting of said neuron with the inhibitor of PKM $\zeta$  is at the outer surface of said neuron, followed by ~~the entry of injecting~~ said PKM $\zeta$  inhibitor into the cell.

19. (Previously Presented) The method of claim 18, wherein the inhibitor of PKM $\zeta$  is chelerythrine or a myristoylated pseudosubstrate peptide.

20. (Previously Presented) The method of claim 19, wherein the inhibitor of PKM $\zeta$  is chelerythrine.

21. (Previously Presented) The method of claim 19, wherein the myristoylated pseudosubstrate peptide comprises the sequence of SEQ ID NO: 4.

22. (Previously Presented) The method of claim 16, wherein the subject in need thereof is experiencing traumatic stress, a pain syndrome, a phobia, or epilepsy.